AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently Amended) A client wireless module, for handling communications to and from an access point wireless module, comprising:

an 802.11b processing section, for processing at least data to be transmitted to the access point wireless module into representations of a transmit signal and for processing at least a representation of a receive signal from the access point wireless module into receive data;

an OFDM processing section, for processing at least a representation of a receive signal from the access point wireless module into receive data and for processing at least data to be transmitted to the access point wireless module into representations of a transmit signal;

at least one transmit antenna, coupled to the 802.11b processing section and to the OFDM processing section;

at least one receive antenna, coupled to the OFDM processing section and to the 802.11b processing section; and

logic for routing information between a client and the client wireless module[[.]],

wherein a transmit processing section to be used for processing the at least data to be transmitted is one of either the 802.11b or the OFDM processing sections, wherein the transmit processing section is defined at least in part upon one or more attributes of the client wireless module and one or more attributes of the access point wireless module,

wherein the one or more attributes of the access point wireless module include a sensitivity of a receiver of the access point wireless module,

wherein the one or more attributes of the client wireless module include a sensitivity of a receiver of the client wireless module,

wherein if the receiver of the access point wireless module has a higher sensitivity than the sensitivity of the receiver of the client wireless module, the OFDM processing section is selected as the transmit processing section and,

wherein if the receiver of the access point wireless module has a lower sensitivity than the sensitivity of the receiver of the client wireless module, the 802.11b processing section is selected as the transmit processing section.

2. (Original) The client wireless module of claim 1, wherein the at least one transmit antenna comprises a plurality of transmit antennas.

3. (Original) The client wireless module of claim 1, wherein the at least one receive antenna comprises a plurality of receive antennas.

4. (Currently Amended) A client wireless module, for handling communications to and from an access point wireless module, comprising:

an OFDM processing section, for processing at least data to be transmitted to the access point wireless module into representations of a transmit signal and for processing at least a representation of a receive signal from the access point wireless module into receive data;

an 802.11b processing section, for processing at least a representation of a receive signal from the access point wireless module into receive data and for processing at least data to be transmitted to the access point wireless module into representations of a transmit signal;

at least one transmit antenna, coupled to the OFDM processing section and to the 802.11b processing section;

at least one receive antenna, coupled to the 802.11b processing section and to the OFDM processing section; and

logic for routing information between a client and the client wireless module[[.]],

wherein a receive processing section to be used for processing the at least a representative of a receive signal is one of either the OFDM processing section or the 802.11b processing sections, wherein the receive processing section is defined at least in part upon one or more attributes of the client wireless module and one or more attributes of the access point wireless module,

wherein the one or more attributes of the access point wireless module include a transmitter strength of a transmitter of the access point wireless module,

wherein the one or more attributes of the client wireless module include a transmitter strength of a transmitter of the client wireless module,

wherein if the transmitter strength of the transmitter of the access point wireless module has a higher transmitter strength than the strength of the transmitter of the client wireless module, the OFDM processing section is selected as the receive processing section, and

wherein if the transmitter of the access point wireless module has a lower transmitter strength than the transmitter strength of the client wireless module, the 802.11b processing section is selected as the receive processing section.

5. (Original) The client wireless module of claim 4, where in the at least one transmit antenna comprises a plurality of transmit antennas.

6. (Original) The client wireless module of claim 4, wherein the at least one receive antenna comprises a plurality of receive antennas.

7. (Currently Amended) An access point wireless module, for handling communications to and from a client wireless module, comprising:

an 802.11b processing section, for processing at least data to be transmitted to the client wireless module into representations of a transmit signal and for processing at least a representation of a receive signal from the client wireless module into receive data;

an 802.11g processing section, for processing at least a representation of a receive signal from the client wireless module into the receive data and for processing at least data to be transmitted to the client wireless module into representations of a transmit signal;

at least one transmit antenna, coupled to the 802.11b processing section and to the 802.11b processing section;

at least one receive antenna, coupled to the 802.11g processing section and to the 802.11g processing section; and

logic for routing information between an access point and the access point wireless module[[.]],

wherein a transmit processing section to be used for processing the at least data to be transmitted is one of either the 802.11b or the OFDM processing sections, wherein the transmit processing section is defined at least in part upon one or more attributes of the client wireless module and one or more attributes of the access point wireless module,

wherein the one or more attributes of the access point wireless module include a sensitivity of a receiver of the access point wireless module,

wherein the one or more attributes of the client wireless module include a sensitivity of a receiver of the client wireless module,

wherein if the receiver of the client wireless module has a higher sensitivity than the sensitivity of the receiver of the access point wireless module, the 802.11g processing section is selected as the transmit processing section and,

wherein if the receiver of the client wireless module has a lower sensitivity than the sensitivity of the receiver of the access point wireless module, the 802.11b processing section is selected as the transmit processing section.

8. (Original) The access point wireless module of claim 7, wherein the at least one transmit antenna comprises a plurality of transmit antennas.

9. (Original) The access point wireless module of claim 8, wherein the at least one receive antenna comprises a plurality of receive antennas.

10. (Currently Amended) An access point wireless module, for handling communications to and from a client wireless module, comprising:

an 802.11g processing section, for processing at least data to be transmitted to the client wireless module into representations of a transmit signal and for processing at least a representation of a receive signal from the client wireless module into receive data;

an 802.11b processing section, for processing at least a representation of a receive signal from the client wireless module into receive data and for processing at least data to be transmitted to the client wireless module into representations of a transmit signal;

at least one transmit antenna, coupled to the 802.11g processing section and to the 802.11b processing section;

at least one receive antenna, coupled to the 802.11b processing section and to the 802.11g processing section; and

logic for routing information between an access point and the access point wireless module[[.]],

wherein a receive processing section to be used for processing the at least a representative of a receive signal is one of either the OFDM processing section or the 802.11b processing sections, wherein the receive processing section is defined at least in part upon one or more attributes of the client wireless module and one or more attributes of the access point wireless module,

wherein the one or more attributes of the access point wireless module include a transmitter strength of a transmitter of the access point wireless module,

wherein the one or more attributes of the client wireless module include a transmitter strength of a transmitter of the client wireless module,

wherein if the transmitter strength of the transmitter of the client wireless module has a higher transmitter strength than the strength of the transmitter of the access point wireless module, the 802.11g processing section is selected as the receive processing section, and

wherein if the transmitter of the client wireless module has a lower transmitter strength than the transmitter strength of the access point module, the 802.11b processing section is selected as the receive processing section.

11. (Original) The access point wireless module of claim 10, wherein the at least one transmit antenna comprises a plurality of transmit antennas.

12. (Original) The access point wireless module of claim 10, wherein the at least one receive antenna comprises a plurality of receive antennas.

13. (Previously Presented) A method of wireless communication between a client device and an access point, wherein a client device is a wireless network station that is portable, mobile or portable and mobile, the method comprising:

transmitting upstream data from the client device using one of an 802.11b protocol or an 802.11g protocol;

receiving the upstream data at the access point;

transmitting downstream data from the access point using one of an 802.11g protocol or an 802.11b protocol in response to receiving the upstream data at the access point; and

receiving the downstream data at the client device[[.]],

wherein upstream data is transmitted using a different protocol than downstream data, and wherein protocols are selected at least in part based upon one or more attributes of the client device and one or more attributes of the access point device,

wherein the one or more attributes of the access point device include a sensitivity of a receiver of the access point device and include a transmitter strength of a transmitter of the access point device,

wherein the one more attributes of the client device include a sensitivity of a receiver of the client device and include a transmitter strength of a transmitter of the client device,

wherein if the receiver of the client device has a higher sensitivity than the receiver of the access point device, the 802.11g protocol is selected for transmitting upstream data,

wherein if the receiver of the client device has a lower sensitivity than the receiver of the access point device, the 802.11b protocol is selected for transmitting upstream data,

wherein if the transmitter strength of the transmitter of the access point device has a higher transmitter strength than the strength of the transmitter of the transmitter of the client device, the 802.11g protocol is selected for transmitting downstream data, and

wherein if the transmitter of the access point device has a lower transmitter strength than the transmitter strength of the client device, the 802.11b protocol is selected for transmitting downstream data.

14. (Currently Amended) A client wireless module, for handling communications to and from an access point wireless module, comprising:

a first protocol processing section, for processing at least data to be transmitted to the access point wireless module into representations of a transmit signal using a first protocol from a plurality of protocols,

a second protocol processing section, for processing at least a representation of a receive signal from the access point wireless module into receive data using a second protocol from the plurality of protocols;

at least one transmit antenna, coupled to the first protocol processing section;

at least one receive antenna, coupled to the second protocol processing section;

logic for routing information between a client and the client wireless module; and

where in the first protocol and the second protocol are different protocols for wireless communication, and wherein the first protocol and the second protocol are selected at least in part based upon one or more attributes of the client wireless module and one or more attributes of the access point wireless module[[.]],

wherein the one or more attributes of the access point wireless module include a sensitivity of a receiver of the access point wireless module,

wherein the one or more attributes of the client wireless module include a sensitivity of a receiver of the client wireless module,

wherein if the receiver of the access point wireless module has a higher sensitivity than the sensitivity of the receiver of the client wireless module, a wireless communications protocol having a higher data rate is selected for the first protocol from the plurality of wireless communications protocols, and

wherein if the receiver of the access point wireless module has a lower sensitivity than the sensitivity of the receiver of the client wireless module, a wireless communications protocol having a lower data rate is selected for the first protocol from the plurality of wireless communication protocols.

15. (Canceled)

16. (Currently Amended) A client wireless module of claim 14, wherein the one or more attributes of the access point wireless module include a transmitter strength of a transmitter of the access point wireless module,

wherein the one or more attributes of the client wireless module include a transmitter strength of a transmitter of the client wireless module,

wherein if the transmitter strength of the transmitter of the access point wireless module has a higher transmitter strength than the strength of the transmitter ~~of the transmitter~~ of the client wireless module, a wireless communications protocol having a higher data rate is selected for the second protocol from the plurality of wireless communications protocols, and

wherein if the transmitter of the access point wireless module has a lower transmitter strength than the transmitter strength of the client wireless module, a wireless communications protocol having a lower data rate is selected for the second protocol from the plurality of wireless communications protocols.

17. (Previously Presented) The client wireless module of claim 14, wherein the at least one transmit antenna comprises a plurality of receive antennas.

18. (Previously Presented) The client wireless module of claim 17, wherein the at least one receive antenna comprises a plurality of transmit antennas.

19. (Currently Amended) An access point wireless module for handling communications to and from a client wireless module, the access point wireless module comprising:

a first protocol processing section, for processing at least data to be transmitted to the client wireless module into representations of a transmit signal using a first protocol from a plurality of protocols;

a second protocol processing section, for processing at least a representation of a receive signal from the client wireless module into receive data using a second protocol form the plurality of protocols;

at least one transmit antenna, coupled to the first protocol processing section;

at least one receive antenna, coupled to the second protocol processing section;

logic for routing information between an access point and the access point wireless module; and

wherein the first protocol and the second protocol are different protocols for wireless communication, and wherein the first protocol and the second protocol are selected at least in part based upon one or more attributes of the client wireless module and one or more attributes of the access point wireless module[[.]],

wherein the one or more attributes of the access point wireless module include a sensitivity of a receiver of the access point wireless module,

wherein the one more attributes of the client wireless module include a sensitivity of a receiver of the client wireless module,

wherein if the receiver of the client wireless module has a higher sensitivity than the receiver of the access point wireless module, a wireless communications protocol having a higher data rate is selected for the first protocol from the plurality of wireless communications protocols, and

wherein if the receiver of the client wireless module has a lower sensitivity than the receiver of the access point wireless module, a wireless communications protocol having a lower data rate is selected for the first protocol from the plurality of wireless communications protocols.

20. (Canceled)

21. (Previously Presented) A client wireless module of claim 19, wherein the one or more attributes of the access point wireless module include a transmitter strength of a transmitter of the access point wireless module,

wherein the one or more attributes of the client wireless module include a transmitter strength of a transmitter of the access client wireless module,

wherein if the transmitter strength of the transmitter of the client point wireless module is higher than the transmitter strength of the transmitter of the access point wireless module, a wireless communications protocol having a higher data rate is selected for the second protocol from the plurality of wireless communications protocols, and

wherein if the transmitter of the client wireless module has a lower transmitter strength than the transmitter of the access point wireless module, a wireless communications protocol having a lower data rate is selected for the second protocol from the plurality of wireless communications protocols.

22. (Previously Presented) The access point wireless module of claim 19, wherein the at least one transmit antenna comprises a plurality of transmit antennas.

23. (Previously Presented) The access point wireless module of claim 22, wherein the at least one receive antenna comprises a plurality of receive antennas.

24. (Currently Amended) A method of wireless communication between a client device and an access point, wherein a client device is a wireless network station that is portable, mobile or portable and mobile, the method comprising:

transmitting upstream data from the client device using [[an]] a first protocol from a plurality of protocols;

receiving the upstream data at the access point;

transmitting downstream data from the access point using a second protocol from the plurality of protocols in response to receiving the upstream data at the access point;

receiving the downstream data at the client device; and

wherein the first protocol and the second protocol are different protocols for wireless communication[[.]], and wherein the first protocol and the second protocol are selected at least in part based upon one or more attributes of the client device and one or more attributes of the access point device,

wherein the one or more attributes of the access point device include a sensitivity of a receiver of the access point device,

wherein the one more attributes of the client device include a sensitivity of a receiver of the client device,

wherein if the receiver of the client device has a higher sensitivity than the receiver of the access point device, a protocol having a higher data rate is selected for the first protocol from the plurality of protocols, and

wherein if the receiver of the client device has a lower sensitivity than the receiver of the access point device, a protocol having a lower data rate is selected for the first protocol from the plurality of protocols.

25. (New) A method of wireless communication of claim 24 further comprising, wherein the one or more attributes of the access point device include a transmitter strength of a transmitter of the access point device,

wherein the one or more attributes of the client device include a transmitter strength of a transmitter of the client device,

wherein if the transmitter strength of the transmitter of the access point device has a higher transmitter strength than the strength of the transmitter of the client device, a protocol having a higher data rate is selected for the second protocol from the plurality of protocols, and

wherein if the transmitter of the access point device has a lower transmitter strength than the transmitter strength of the client device, a wireless communications protocol having a lower data rate is selected for the second protocol from the plurality of protocols.